

**Aldous Huxley (1894–1963)**  
***The Human Situation*, lectures at Santa Barbara, 1959**

**Lecture 5 – *How Original is Original Sin?* 16<sup>th</sup> of March, 1959<sup>1</sup>**

Ladies and Gentlemen,

Up till now, I've talked about the human situation in relation to the very large – the largest possible scale, the planetary scale, and the population scale. Today, I want to bring it in to the much smaller scale of the individual and to discuss the effects about what used to be called nature-nurture, genetics and environment, and the relations with our general philosophy of life and with our political ideals.

And I shall begin with a question. And the question is this: "Just how original is original sin?"

This is a problem which has been preoccupying men in all countries for a very long time. How original is the – what seems to be the fundamental badness of man, which has been most strongly stressed in orthodox Christianity. And how much – how original is what may be called original virtue, which is stressed most strongly in the Chinese tradition, in the Taoist tradition, and is of course stressed also in the Hindu tradition where the basic nature of man is called the Atman, which is identical with the basic of nature of the Godhead.

And of course, within the Christian tradition we have had accounts of this original virtue which the Quakers, for example, call the "inner light", which the medieval mystics used to call the *scintilla animae*, the spark of the soul, or the *synteresis*, there were a number of names for it.

And this question, as I say, has been asked ever since man started philosophizing about himself, and has been answered in a great variety of ways. For example, within the Indian tradition, it has been answered in terms of the theory of *karma*; that each of us comes into the world with the end products of enumerable past lives which somehow have to be worked out life after life. Which is, of course, an idea of heredity, that our original sins, our original destiny is preordained for us by previous existences, which we inherit.

And then in the Greek tradition, this whole problem is discussed in the relationship – in terms of the relationship between man and the Gods, who are the human ideals magnified and projected into the outside world. And the relationship between man and the Gods on one side, and necessity on the other. A necessity which no prayer can move, which nothing can change, which dominates even the Gods. This was a fundamental idea in Greek religion and thought.

---

<sup>1</sup> This and the accompanying 17 lectures were given at the University of California, Santa Barbara (UCSB) in the spring and fall semesters of 1959 titled *The Human Situation*. Huxley was the first person to have received an honorary doctorate degree from UCSB. For further details on the organizing process around these lectures, see lectures IX – *Art, Artist and Society* and XVIII – *The Natural History of Visions*. Thanks to Yoni Osteen and Steve Mendoza for making this transcript available. Please contact the editor, Hans Frederik Brobjerg, for any suggestions, corrections or improvements: hf1985@gmail.com.

And finally we come to the Judeo-Christian tradition, where in the past this problem was discussed in terms of grace and free will, of nature and grace, of predestination and of salvation by works. The whole thing was summed up in four curious lines which occur in a poem of Matthew Prior's, a most surprising poem cause he generally wrote rather frivolous and charming lyrics. But this is a long reflective poem about religious problems, in which these lines occur:

Could destined Judas long before he fell  
Avoid the terrors of a future hell?  
Could Paul resist, deny, or not embrace  
Obtruded heaven and efficacious grace?

This sums up in very brief and picturesque way the problem of predestination. And of course, in the history of Christian theology, the whole problem was thrashed out at the beginning of the 5<sup>th</sup> century in the great controversy between Pelagius on the one hand, and St. Augustine, on the other. It's worth going into this a little bit because it seems to summarize in an older tradition these problems which still vex us, the problems of nature and nurture.

Pelagius was apparently a Briton. He came either from Scotland or possibly from Ireland, and brought up in the traditions of the British Church of that period, which was being profoundly affected by the Eastern Church rather than the Roman Church. And he made his way to Rome as a middle-aged man about 400. And he found Rome then, as it generally was for many centuries thereafter, a real sink of iniquity. But he also found, which disturbed him very much, that the Romans were justifying their behavior by – in terms of the Augustinian doctrines of the total depravity of man and the bondage of the will to evil. I mean, granted this doctrine, why make any effort to behave a little bit better?

And Pelagius was – evidently was an early example of British practicality and empiricism, and he decided that what was necessary was a reform of social institutions, and self-help. He was convinced that man could improve himself, both by his own efforts and by making respectable and decent social institutions.

He denied the originality of original sin. This was his profound heresy at that time. He denied that the sin of Adam affected anybody except Adam himself. He denied that went on affecting the entire human race, and he insisted that all children were born innocent, even as Adam had been born innocent, as opposed to the doctrine of St. [be consistent with above occurrence of St.] Augustine, who affirmed children were born in original sin and unless baptized, would certainly be damned. And he even in very picturesque terms asserted that hell was paved with a mosaic of infants less than a span<sup>2</sup> long, which we find, I must confess, a somewhat frightful doctrine. But nevertheless, it followed logically from the assumption of the originality of original sin.

---

<sup>2</sup> Old measure of distance, measured by a human hand, from the tip of the thumb to the tip of the little finger. 9 inches or ca. 22.86 centimeters.

Well we can't go into the details of the controversy, which were extremely important in the history of Christian dogma, but it's worth pointing out certain peculiarities of the Pelagian Doctrine. He – Pelagius insisted upon the fact that men were born without any inherited characteristics. He said that men were born *non-pleni*, not full, without a character, and that they were born *sine virtute, ita sine vitio*, that's to say without virtue, even as without vice, without inborn tendencies either to good or to evil. And that man was formed, became what he was, for good or for ill, in virtue of his surroundings and of his reactions to them.

This was of course profoundly at variance with the Augustinian Doctrine, and was also at variance with the Orthodox view of the Church at the time, and was condemned. And for the next 15-16 centuries – no, I beg your pardon, for the next 12 centuries or so, this kind of compromise had to be worked out between Pelagianism or semi-Pelagianism, on the one hand, and extreme Augustinianism on the other.

Well, the next important Pelagian figure who appears is one of the thinkers of the 18<sup>th</sup> century, an age when people began to believe in inevitable progress, which of course entails a belief that man is determined primarily by the nature of his environment and can advance by improving his environment. And we find in a French thinker who is extremely influential at his time, albeit little read now, the Helvétius, we find a doctrine which affirms – reaffirms the Pelagian doctrine, that man is born without any hereditary characteristics, and that he becomes what he is in virtue of what he learns and of how he reacts to the influences around him.

And Helvétius made the somewhat astonishing statement that any shepherd boy of the Cévennes could be turned into an Isaac Newton by suitable education. And this sort of view prevailed, I think, to a considerable extent among the thinkers of the so-called Enlightenment of the 18<sup>th</sup> century, and with certain elements of it, I think, are still to be found in the later Utilitarians of the 19<sup>th</sup> Century.

And on the biological level we find also in France the interesting figure of Lamarck, who insisted that environment could create hereditary factors. In a word, he insisted on the heritability of acquired characteristics. This view was of course controverted in the 19<sup>th</sup> century first by Darwin and then in a detailed study of genetics by Mendel and his followers. And today, I don't think anybody – any geneticist - accepts this view, except possibly certain geneticists in Russia headed by Lysenko who make strong claims that they can modify species by environmental changes in such a way that the changes within the individual plant will be inherited. These claims, of course, as far as I know, have never been substantiated and the great majority of geneticists remain completely opposed to this idea and completely – to talk about it in theological terms, they remain completely Augustinian as opposed to Pelagian.

At the same time as Lysenko, or a little rather somewhat before Lysenko began his preaching in Russia, we had the phenomenon in this country of J. B. Watson's Behaviorism. In the early days of Behaviorism, Watson made some

really extraordinary statements which exactly parallel those of Helvétius. He affirmed that, for example, that he could find – behaviorists could find no evidence of inherited human faculties such as music or mathematics, and that man was entirely determined by environmental causes. I think there has been some modification of this point of view, but even today the behaviorists tend to play down hereditary factors to an extraordinary extent. For example, in the – in Professor Skinner’s monumental *Science and Human Behavior*<sup>3</sup>, there is exactly one page devoted to hereditary factors and all the rest is devoted to the determination of behavior by environmental conditioning.

In general, we may say at present that people with a Behaviorist turn of mind tend to be Pelagians whereas those with a eugenic turn of mind tend to be Augustinians. The truth, of course, as usual lies somewhere between the two extremes. And it seems perfectly clear that both hereditary and environmental factors are equally important and that in point of fact we can never isolate the two. There used to be this argument “is nature more important than nurture or nurture more important than nature?” The answer is that both are equally important and they play into one another’s hands and that this, in fact, is the truth of the matter.

But in view of the fact that there has been for such a long time this underplaying of hereditary factors, I think it’s worthwhile to go into the – what is original and inherited in the human individual. In general, we find that as we go up the evolutionary scale, the variability of species increases. And there is no question at all that when we reach man, we find here the species with the highest level of variability of any species that we know.<sup>4</sup> There are these extraordinary inherited differences between human individuals.

There are, for example, very great anatomical differences. Perhaps the best of the recent atlases of anatomy, Anson’s atlas of anatomy<sup>5</sup> in 1950. This is, I think, probably the first atlas of anatomy to stress this fact of the profound variability of human beings on the anatomical level. For example, he gives eight different plates to show the common variations of the human hand. He has to give no less than twelve plates to show the human heart in its commonest variations. And there are people who have written of the heart who say that the heart is if anything more variable than the human face. Well considering how extraordinarily variable human faces are, we can see that this is an amazing statement.

And there are many other ways in which human beings vary. For example, take the very important organ, the intestine. This, in long – in thin skinny people, compared with round soft people who tend to run to fat, the difference between the weight and the length of intestine is something fantastic. In the fat person,

<sup>3</sup> It actually sounds like he says “Science of Human Behavior, but the book is called “Science and Human Behavior”.

<sup>4</sup> We now know this is not true on the genetic level. Actually, “the humble worm” is the most genetically diverse animal known: <http://blog.pnas.org/2013/06/the-most-genetically-diverse-animal/>

<sup>5</sup> I did not capitalize it as the actual book is called An Atlas of Human Anatomy.

the intestine may weigh twice as much as in the thin person, and may be at least 50% longer, and it's consequently a great deal more efficient in doing its job than in the thin person, which is of course why the fat person tends to become fat even when he eats quite a little, whereas this is why the thin person doesn't become fat even though he eats a great deal.

And then we find the same degree of differences, between, for example, the – in the case of the ductless glands. These figures are really quite extraordinary when one looks into them. For example, the pituitary can vary from 350 mg to 1100 mg, and these are in perfectly normal people, people called normal. The thyroid can vary from 8 to 50 grams. The parathyroid from 50 to 300 mg. The male gonad from 10 to 45 grams. The ovaries from 2 to 10 grams, and the number of ova contained in normal ovaries may vary from as little as 30,000 to as many as 400,000. The pineal gland can vary between 30 and 400 mg. And the normal pancreas can have as few as 200,000 islands of Langerhans, or as many as a 1,800,000.

And this indicates the incredible width of variability within the anatomy, and similarly there are great differences in our physiological reactions to things. There are great differences, as experimenters, such as Blakeslee have recently pointed out, in human being's taste perceptions. There are substances which some people taste as salt, some as sour, some as bitter, and some as sweet – the same substance. There are enormous differences in visual acuity. In color perception, there are huge differences ranging all the way to complete color blindness, and there are immense differences in the acuity of peripheral visual perception.

At the same time, there are great differences in the capacity of different individuals for producing various of the enzymes which control metabolism and nervous action. There are—I think the figures of these are not accurately known, but it is known that there are immense differences between individuals in this field.

And in general, I think, we can point out that these anatomical and physiological differences, which are indubitably genetic are of immense importance because all such differences in the very nature of things must be reflected to some extent in our mental and psychological life. In general, I suppose, one can say that the enormous mental and psychological differences which we perceive between human beings are correlated with—first of all, with differences in the structure of the nervous system, although we don't know exactly how these differences affect different people, it is quite certain that the brain is—different brains are very different from one another, both in the number, the shape, and arrangement of their neurons, and that undoubtedly this has an effect upon our way of thinking and our characters.

Then, very important—and it's becoming clearer and clearer every year that this is a matter of immense importance—are the genetic differences between the production of the different enzymes which affect metabolism and

nervous action. This is the second genetic correlate of character and temperamental differences.

And the third correlate is probably blood supply, which is of great importance and which varies very greatly between human beings. Some people's hearts pump much more blood than others'—much more rapidly. Others—the arterials in others are more efficient in carrying blood to different areas, and so forth.

So that we have here, quite clearly, the genetic basis for very many of the differences which in fact occur between human beings. Now this, of course, is not to say that many of the differences which we see are not also determined by environmental factors. It is, however, to say that we cannot think of environmental factors alone, but must always think of the two factors together, the genetic factor and the environmental factor.

And one of the reasons, I think, why the modern psychiatry has so astoundingly neglected the genetic factor in psychology is precisely the fact because it has neglected the physical, the bodily factor in man. And, if you examine the body, it's perfectly clear that there are enormous genetic differences between human beings. But if you ignore the body and concentrate solely on psychological traits, then it isn't so obvious, although by inference it's perfectly clear that the enormous physical differences between human beings must be reflected in psychological differences.

And I must say, I'm always astounded when I read the literature of modern psychiatry to see, that the fathers of the science, the founding fathers such as Freud and Jung and Rank, paid almost no attention at all to the physical side of human beings and therefore completely ignored the genetic side of their problem. Only in [Alfred] Adler do we find some reference to the physical side of the human personality. In the others, you can read the so called "case histories" and never be told who these people are.

For example, you get a description, here is a Mrs. X, whose troubles are described, but you are never told if Mrs. X weighs ninety pounds or two-hundred and fifty pounds. But there is obviously a considerable difference psychologically between a woman who weighs ninety and a woman who weighs two-hundred and fifty. Here is Mr. Y, who is in a bad way, but you are never told whether Mr. Y resembles an ox or a daddy-long-legs, whether he's like a panther or like a jelly-fish. Again, this obviously makes a prodigious difference, but as I say, one can read book after book of modern psychiatric case histories without ever finding these obvious facts mentioned.

And even so extremely acute and philosophical a psychiatric writer as Dr. Erich Fromm, although he refers in his book *The Language of Dreams*, although he refers to the importance of the constitutional and temperamental factors in psychological disturbances, yet he just refers to it in half a paragraph and never goes into the details of this at all. In his other books I've never found any reference to the inherited somatopsychic factors.

We talk about psychosomatics now and this is very important—it's very important that the doctors of the body should realize, that the mind has effects

upon the body, but it is equally important that the psychologists should realize that the body has effects upon the mind. And that many of these bodily effects are obviously genetic in character, and that there are hereditary factors, therefore, in practically all psychological disturbances.

The most obvious case in point, which again as far as I know is never discussed in any of the psychiatric literature, is “why aren’t we all crazy?” If all our trouble is due to traumatic experiences in childhood, we’ve all had very grave traumatic experiences, and yet only some of us are crazy and quite a number remain relatively sane.

Well again, it’s quite obvious that the—such phenomena as the Oedipus and sibling rivalry must act upon a biological substratum which is different in different cases. That there are certain people who have no psychological resistance just as there are certain people who, undoubtedly for genetic reasons, have very little physical resistance to infection. And this is of immense importance and it’s possible that just as one can do something by biochemical means to correct the lowered resistance to infections, so it’s perfectly possible that we might by biochemical or nutritional means do something to correct, or mask at least, the anomalies introduced by some genetic work, which make certain people much more subject to being affected by psychological traumas than others are.

But as I say, unfortunately, one finds almost no reference to this at all in the psychological literature, and there is in general a kind of dogma which may be called a dogma of environmental determinism in all these cases, which almost systematically ignores the psychological factor.

Well, this state of things is not universal. I’m glad to say within recent years, there has been a strong movement, which is still within the psychiatric movement an unorthodox movement, towards what is called a constitutional psychology. And the pioneer work in this field is being done by Dr. William Sheldon and his collaborators, and also pioneer work in constitutional medicine in the relationship between disease and certain hereditary body peculiarities is being investigated by people like Draper and Dupertuis, and a lot of very interesting results have emerged from this.

What Sheldon has shown is that we are of course perfectly wrong in thinking of types of human beings, this is one of our troubles. The nature of our language is such that we like to think in terms of categories and pigeonholes of substantial types. It’s very difficult for a language such as ours to talk about a continuum of any kind. In the world of physics, for example, when people had to talk about the universe as a continuum, they had to invent a special ad hoc language which is the language of the calculus and other forms of mathematical language.

And this is the same thing in psychological problems. As Sheldon has shown and as it’s perfectly obvious it must be the case, we don’t vary by jumps, we can’t be just put down as different types, but there is a continuous variation among human beings, and it’s a variation not between two poles, which we have

a frightful tendency to imagine—we always like thinking in terms of dichotomies—it's much more realistically described as a variation—continuous variation within a three pole framework, which I can't go into the Sheldonian classification, but I do think that it is an extremely realistic classification, and it does permit us to place human beings in relation to one another and to see to some extent how the different genetic variations between the body types are correlated with variations in temperament.

Now of course, this connection between hereditary body type and temperament has always been intuitively understood by the dramatists and storytellers. For example, no dramatist is sufficiently idiotic to put the character of a Falstaff in the body of a Cassius, or the character of a Pickwick in the body of a Scrooge. It's perfectly obvious to us when we observe it in our ordinary life that there is some kind of correlation between the body type and the temperament. And we have such phrases as—such lines as in *Julius Caesar* where Caesar says—how does it begin?

Let me have men about me that are fat,  
Sleek-headed men, and such as sleep o' nights.  
Yond Cassius has a lean and hungry look;  
He thinks too much, such men are dangerous.<sup>6</sup>

Well, he thinks too much, but he is not like what Sheldon would call the extreme ectomorph, who thinks a great deal but never acts, or acts only feebly. Cassius is one of those extremely dangerous persons who think a great deal but have enough of what Sheldon called the "mesomorphic factor" to act very strongly and efficiently and very—too little of what Sheldon calls the "endomorph factor", the factor of geniality and outgoing jolliness, to act with kindness. He is the typical—Cassius is the typical fanatic. And I think we can imagine his physique to be very closely related, for example, to that of Savonarrola, who had the same tremendous power of thinking connected with a terrific drive and a minimum, I would say, of the milk of human-kindness and compassion. This is the typical fanatical type.

This three-polar system of Sheldon's is interesting inasmuch as it corresponds very closely with the three-polar system which we find in the religious tradition of India. In the Christian system, we have much more of a dichotomy. There is what has always been recognized as the way of Martha and the way of Mary, the way of action and the way of contemplation. But of course even within the Christian system, it's been recognized that the way of Martha probably has more than one aspect to it.

But in the Indian system, and one can read it—read the full development of this psychotheological theory in the Bhagavad Gita, human beings are divided into three main classes. Those who worship by means of devotion, who practice what is called Bhakti Yoga, devotional worship, those whose worship is

<sup>6</sup> Shakespeare's *Julius Caesar* (I, iii, 192-5).



predominately in the field of action, in performing duty in a selfless way, these are called the people who practice Karma Yoga, and those who practice worship through contemplation or through knowledge, which is called the practitioners of Jnana Yoga.

And these correspond extremely closely to the Sheldonian three-poles. The endomorph—the extreme endomorph, who inevitably will be led towards the practice of emotional devotion, the mesomorph would be led towards a more active path, the path of action dictated by duty, and the extreme ectomorph would be led towards the life of introversion and contemplation.

And here we may remark on a very curious thing, that insofar as the psychiatrists have recognized these kinds of temperamental differences, they have recognized only a dichotomy. Jung's insistence, for example, on the difference between the introspective and extrospective, introvert and extrovert, is a division into two. He has failed completely to recognize the fact that there are two very different forms of extrovert. There is the driving extrovert, the extrovert who wishes to dominate either things or people, the what—the Sheldonian mesomorph, and there is the emotional kindly extrovert who wants to spill the emotional beans and to bring everybody into his confidence and be on good terms with everybody, who is also—these two polar opposites, they are opposite to one another and they are also opposite to the ectomorph, who is an introvert and doesn't want either of these things.

And it's an interesting fact that, of course, progressive education represents an overvaluation, exclusive valuation, of the mesomorphic and the—possibly to some extent—the endomorphic point of view at the expense of the ectomorphic point of view. Unfortunate children who are born with the introverted tendencies are made to share and to rush around with others and to be absolutely miserable because what they want is privacy and not to be pushed around with a great herd of other people. But this has become fashionable now, just as it was fashionable in an earlier age to try to repress the mesomorph and the endomorph, to impose the sort of stoical restraints upon the overflowing spill-the-beans endomorph and to impose quasi-physical restraints on the exuberant energy of the mesomorph.

And this, I mean—you can look at earlier civilizations, and see the social patterns which were created for doing precisely this. I mean, this has always been a great problem of what does one do with these powerful muscular men with this tremendous drive for domination. Well, one of the answers in the Middle Ages was to put them into religious orders of Knighthood, where they could go out and fight with the Mohammedans, which kept them out of the way as far as Europeans were concerned. And they were bound by all kinds of traditions and oaths and so on and were kept in fairly good order by this means.

At the same time, means were found for protecting the introverted people without much muscular energy by establishing convents into which they could retire and this was, I must say, an extremely sensible solution to the problem which permitted the various people to find their niches most suitable to them in

society and which prevented the more violent of them from doing a lot of mischief to their fellow men.

Now, as I was saying, the tendency at the present time is to underplay the importance of the genetic factors. Orthodox Marxism, for example, is based upon the idea of environmental determinism. It doesn't like the idea of acquired differences. And the same thing—of congenital differences. And the same thing is true certainly of the earlier behaviorism, although I think it's been modified to some extent now. And there is—again, I think there's a tendency in this country, because of possibly a wrongly interpreted view of democracy, a tendency to feel that too much stress upon the fact that there are congenital and unchangeable differences between people, that stress upon this fact is somehow undemocratic, and is also very depressing.

I remember years ago my brother telling me that he'd been asked by one of the slick paper magazines to write an article on genetics, and he'd written an article, and I'm glad to say he was paid for it. But the editor said that he was sorry he couldn't use it because the conclusions in regard to the ingrained and inborn genetic differences between people would be found too depressing by his readers. Well unfortunately, the nature of nature is that it isn't particularly democratic in that sense of the word, it's much more Democratic in the Napoleonic sense of the word, where he said that what he was doing was to open careers to talents.

And the interesting thing is that in Russia, in spite of the fact that Lysenko is allowed to go around and say that he can turn barley into wheat, which he certainly can't, they have decided that for the sake of finding men and women capable of exercising efficient leadership, they must make a careful selection of genetically highly endowed people. And in effect we see that Russian education as it has developed now is essentially an aristocratic education. It's an education concentrating on people with the highest IQ and the highest kind of drive, and not making very much effort to impose a veneer of universal education on anybody, that the universal education stops very soon, but there is a most intensive education of this upper crust for the sake of creating a really efficient oligarchy to run the country. So that, as I say, it's an aristocracy, or to be more true to use the word which has been used recently in Britain by anthropologists there where they speak about the gradual emergence of a "meritocracy". This is happening in Britain too and it will certainly happen everywhere as technological societies demand this sort of thing, that there will be a stratified society based mainly upon the capacity of people to pass examinations and to go through more and more specialized and intensive forms of training.

And as I say, it's a curious thing to find that although the Marxist theory is opposed to stressing genetic factors in man, the necessities of practical life in a Marxist country have made it necessary for the Russians to devote more attention to the highly endowed people than is being given at the present time in the democratic countries.

Now, what are the—we must pass now to the other end of the bridge, these have been more or less factual discussions, what are—in the world of values and the world of thought—what are the consequences of this enormous variability between human beings? To my mind the consequences are perfectly clear. The consequence of this—the fact of generaliza—of varia—. The consequence of the fact of variability is that liberty is a very precious thing. After all, if we were all the same as Helvétius pointed out or as Pelagius pointed out or as Watson pointed out in his early days, if at birth we were all the same, then there would be no point in liberty, what would be good for one would be good for all. But after all the proverbs do represent a summing up of an immense amount of homely wisdom, and "one man's meat is another man's poison"<sup>7</sup> is an absolutely true statement of fact.

And this human variability imposes upon us, it seems to me, the duty of preserving individual liberty and of encouraging tolerance, of preventing majorities from oppressing minorities, of permitting people to have a certain measure of self-determination in their lives. In the religious tradition, this of course has been expressed in the doctrine that individual human souls are of infinite value, which hasn't, of course, prevented the organized churches from trying to dragoon the faithful into a single pattern.

We have this—I think this goes on always. We have this tension between the fact of genetic variability and the fact that society does on the whole like to create a single manageable pattern of human life. But—and again, the problem, as usual, is to make the best of both worlds, is to find out how we can have a stable and viable society which yet gives scope to the enormous variations which as a matter of empirical fact do exist between human beings.

The extent to which societies have imposed patterns upon extremely variable individuals has of course greatly varied at different times of history and at different levels of culture. In the more primitive cultures, where societies are small and bound by a very tight tradition, the pressure to conform to the local tradition naturally is very, very high. And of course, anybody who reads the literature of anthropology must always be astounded by the fantastic nature of some of the traditions to which men have had to conform themselves.

The advantage of a large and complex society such as ours is that it does permit the variability of human beings to express itself in a great variety of ways. There does not have to be the kind of intense conformity which we find within the primitive small society. But of course, there is always a drive for conformity, which is imposed from without by law and tradition, and which individuals impose upon themselves from within by trying to imitate what the society regards as the ideal type.

I recommend in this context a very valuable book by the French philosopher Jules de Gaultier, which was published about 50 years ago called

<sup>7</sup> "Ut quod ali cibus est aliis fuat acre venenum." Lucretius (c. 99 BC–c. 55 BC), *De rerum natura*, IV, 637. First translated into English as above in Thomas Middleton's *Plato's Cap cast at the year 1604*, 164. (Page 200 of the 2007 Oxford edition of Thomas Middleton. *The Collected Works*)

*Bovarysme*. The name is derived from the heroine of Flaubert's novel *Madame Bovary*. And if you remember that novel, this unfortunate young woman was always trying to be what in fact she was not. And Gaultier generalizes this. He says that we all have a tendency to try to be what we are not. We try to be what the society in which we are brought up thinks is desirable, and our natural tendency is to go here, but the idealists say over here. And we try to move from here to here. And Gaultier has a very good phrase, he says that everybody has a Bovaric index, a Bovaric angle, that some people have a very narrow Bovaric angle—what they intrinsically are by heredity is not too different from what they try to make themselves by imitation. But some people have Bovaric angles of ninety degrees, and some are I think even three hundred and six—of a hundred and eighty, and are trying to be exactly the opposite of what, by nature, they are. And in general, as you can imagine, this leads to very disastrous results.

Well, as I say, this is one of the mechanisms by which, from within, society gets people to conform to itself, by setting up an ideal and relying on people, on individuals, to conform voluntarily with the ideal. And of course, it's not for nothing that the most—probably the most influential, the most widely read book of Christian devotion is called *The Imitation of Christ*. I mean this is precisely the mechanism—it is a mechanism of imitating an ideal.

And of course, unfortunately, as we see only too clearly in the study of juvenile delinquency, the ideal imitated by many of us is not the highest ideal. I mean, there is an imitation of Al Capone, unfortunately, an imitation of the young tough who goes around beating up people. And the imitation of rock and roll performers and so on and so forth.

But this process is always present in any society, and as I shall try to discuss in a later lecture, it always has to be present, but what we have, then, to discover is some method of making the best of the social drive towards conformity while at the same time safeguarding the genetic variability of individuals.

And here it's important to stress the fact that in order to make the best of genetic variability, we have to improve the environment to the greatest possible extent. It is only when everybody has equal nutritional and educational opportunities that we shall be able to see to the full what their native congenital capacities are. These capacities will not then be masked by, say, bad nutrition or the absence of any educational facilities, but they will have a possibility to develop to their fullest extent. And so that as opposed to what many of the older eugenicists have talked about, it is absolutely necessary to have a society which shall stress the importance of a good environment. It's not enough just to sterilize the unfit or try to breed differentially from the more fit. It is necessary to have the best possible environment so that we may be able to see what are the full genetic possibilities of individual men and women, boys and girls.

And so we can end up then by saying that what these facts about human variability seem to show is first that liberty is of immense importance, that tolerance is of immense importance, that a decent equal environment for all, an equalizing of the environment upwards for all, is of immense importance. And

then that it is of immense importance to—not to try to bully these people who are genetically different into being like everybody else. Within the limits of law and order, to try and permit each individual to develop according to the laws of his own being, according to—along the—in accord with the principle laid down by religion that the individual soul is of infinite value. Our ideal should be, I think, what Charles Morris, the Chicago philosopher described in his book *The Open Self*. We should have an open society composed of open selves. This is a simple, and I think a very valuable formula.

Well, with this we can wind up, and in the next lecture I shall talk about the nature of the pressures exercised by society upon this extraordinarily variable human individual, and in particular the nature of the pressure exercised by a society such as ours, which is a society in which technology is continually advancing and is invading more and more fields of human activity.

For the present, let me just leave you with this ideal of the open society of open individuals.